

Who Runs Faster, Tall or Short People

By: Zane Nichols

Problem: Who runs faster? Tall people or short people.

Introduction: I chose this experiment because I have seen many fast short people and many fast tall people. I've always wondered if tall people are faster because they gain more ground faster with their long legs, or if short people are faster because it's easier for them to get their legs moving faster.

Background Information: I have looked at a couple of websites and I have seen that tall people have an advantage. They have a longer stride which lets them gain more ground. So taller people should be doing long distance running because they have longer strides. It also depends on many other factors like the state of fitness they're in, how much energy they have, how far it is and how much endurance they have.

Hypothesis: I think that tall people will run faster.

Materials:

1. Pencil
2. Paper
3. An area to test
4. Volunteers
5. Stopwatch

Procedure:

1. Gather all materials
2. Take all volunteers to testing area
3. Have all volunteers but one leave so no one sees each other's score
4. Time volunteer and see how long it takes them to run the court.
5. Repeat with other volunteers
6. Record data
7. Finish project

Major Observations:

Some people took their shoes off. Some people had good gripping on their shoes and some people had bad gripping. They didn't have time to warm up or stretch so they didn't run as fast as they could have.

Results:

My results are that tall people do run faster. I averaged the times of all short people. Then all the tall people and the tall people run .25 seconds faster than the short people I tested. the average of the tall people is 5.54 seconds. The average of the short people is 5.79 seconds.

Conclusion:

My hypothesis was correct. According to the people I tested and the times they got. Tall people do run faster. It's not by much but its enough to say that tall people always win. :)

Possible Applications:

This could be used if you are arguing with someone about who's faster and you could bring up points like (if your the tall person) i have a longer stride there fore i run faster.

Possible Causes of Error:

Some people took there shoes off. Some were wearing clothes could have possibly slowed them down. Some people slowed down at the end which affected the time they got. I might not have always hit the stop button on the stop watch right as they got past the finish line.

Time Spent:

All science work days.

Bibliography:**Acknowledgments:**

THANK YOU VOLUNTEERS!!!!!!

THANK YOU MRS. RIFFEL!!!!!!